Aquatics Trunk

This educational trunk, provided by the Sawtooth National Recreation Area, is all about water. It contains activities about the water cycle, watersheds, the importance of water, aquatic invasive species, and animals that live around water. Listed below are the different activities you can find in this trunk, with brief descriptions, what grades they are suggested for, and what materials we are able to provide.

- **All About Water, and How We Use It**
  Program Overview: This program discusses the water cycle, and our own water consumptions.
  Grades: 2-4
  Teacher needs: small portable whiteboard and felt board or something else for Velcro attachment.
  Main topics: Water cycle, water consumption

- **Animals that Live Around Water**
  Program Overview: This program discusses one bird, one insect, and one mammal that live their lives living around water.
  Grades: 1-4
  Teacher needs: small portable whiteboard and felt board or something else for Velcro attachment.
  Main topics: Three animals that live their lives around water

- **Dragonfly Pond**
  Program Overview: This program is slightly more advanced version of **All About Water** and discusses our human development of spaces around water sources.
  Grades: 5-8
  Teacher needs: masking tape, scissors, regular sized paper, large paper (18”x24”).
  Main topics: Human development of places around water

- **H_2O Olympics**
  Program Overview: Students compete in games to teach them about adhesion and cohesion
  Grades: 4-8
  Teacher needs: large aluminum trays, several brands of paper towels, tall glasses
  Main topics: Adhesive and cohesive properties of wate

- ## How to Build a Model Water Shed
  Program Overview: Students are able to get creative by building their own watershed and get to see how water flows through it, and how sediment and pollutants can be picked up along the way.
  Grades: 3+
  Teacher needs: All materials that teacher chooses to use for activity. (Disposable cake pans or plastic bins, florist foam, aluminum foil, model animals, building models, permanent markers, water can or sprat bottle, hot chocolate or chocolate pudding mix, lime and orange gelatin mix, straw, small artificial turf pieces, glue, modeling clay, sponges, bucket, etc)
  Main topics: Watershed modeling

- ## Impacts of Flooding and Pollution
  Program Overview: This is a good partner program for **Animals that Live Around Water**. It is focused on the effects that unusual or unprecedented flooding in a mountain biome system, on both humans and animals, and ways that some of those effects can be mitigated.
  Grades: 3-7
  Teacher needs: small portable whiteboard and felt board or something else for Velcro attachment
  Main topics: Lasting physical impacts of unprecedented flooding events

- ## Invertebrate Explorations
  Program Overview: Students go to a local body of flowing water to search for and identify the many invertebrates that it contains, using the invertebrates they find to try and determine the quality of the water.
  Grades: All
  Teacher needs: transportation to exploration spot
  Main topics: Invertebrate ID

- ## Make a Mini Water Cycle
  Program Overview: Use simple everyday items to mimic the water cycle
  Grades: 1-4
  Teacher needs: Large metal or plastic bowl, pitcher or bucket, clear plastic wrap, dry ceramic mug, water
  Main topics: Water cycle model

- ## Net Gain, Net Effect
  Program Overview: In this program, students learn about the evolution of fishing techniques and the effects of these changes on fish populations.
  Grades: 5-8
  Teacher needs: nets of different mesh size, 1 pound each of lime beans, pinto beans, black beans, lentils, and rice, and four containers large enough to hold ¼ of bean and grain mixture.
  Main topics: Changing fishing techniques and their impact

- ## No Bellyachers
  Program Overview: Students participae in a series of demonstrations and a game of tag to show how illness causing bacteria and viruses are caused by water.
  Grades: 4-8
  Teacher Needs: Clean spray bottle, small bags, timer
  Main topics: Virus transmission through water

- ## Rain Pictures
  Program Overview: Children color or paint pictures and watch what rain does to the colors
  Grades: Pre-K – 1
  Teacher needs: Rain or spray bottle
  Main topics: Effects of water on water-soluble colors

- ## Silt: A Dirty Word
  Program Overview: Students will perform experiments to learn how humans and the environment affect the amount of silt in flowing water, and in turn how the amount of silt affects the flow of the water.
  Grades: 3-4
  Teacher needs: 1 clear plastic 1 gallon container, enough pea-gravel to cover the bottom of the container, 1 cup course sand, 1 cup silt, 3 straws per person, brightly colored beads, plastic tablecloth, paper towels.
  Main topics: Silt levels in flowing waterways

- ## The Incredible Journey of Water
  Program Overview: Students go through an in depth lesson of the water cycle, with interactive dances and games.
  Grades: 1-4
  Teacher needs: Small portable whiteboard or chalkboard with markers or chalk, colorful beads and string.
  Main topics: Water cycle and the water web

- ## The Water Cycle
  Program Overview: Students will construct a model of the water cycle, implement the model, and describe the steps of the water cycle as they occur.
  Grades: 5-8
  Teacher Needs: 3-lb coffee can, small plastic funnel, 1" diameter rigid plastic tube, 5 – 16 penny nails, soup can, 12" piece of wire, ½"x20"x2" piece of wood, 2"x2"x8" piece of wood, ice
  Main topics: Water cycle

- ## The Water Cycle Bottle Model
  Program Overview: Students will use 2-litre soda bottles to model the different processes of the water cycle
  Grades: 4-8
  Teacher Needs: soil, fast growing plant seeds, film can or additional bottle cap, ice
  Main topics: Water cycle

- ## To Dam or Not to Dam
  Program Overview: Students play a game to evaluate benefits and drawbacks of dam construction on a river. This is very relevant for the current dam situation on rivers that flow into Idaho.
  Grades: 5-8
  Teacher needs: None
  Main topics: Pros and cons of man-made dams

- ## Water Match
  Program Overview: Students match up pairs of water picture cards and in the process learn to distinguish in the three states of water – solid, liquid, and gas
  Grades: 1-3
  Teacher Needs: ice cubes, glass of water, cold spoon
  Main topics: The three states of water

- ## What's in the Water
  Program Overview: Students will play a game that looks at the major sources of pollution in water, and make inferences about the effects of those pollutants on wildlife and wildlife habitats.
  Grades: 5-8
  Teacher needs: ¼ tsp measure
  Main topics: Water pollution and its effects

- ## World Travelers
  Program Overview: Each student pair or group receives an informational page on a local aquatic invasive species to Idaho, and presents it to fellow students. Students learn about how to control and avoid introduction of invasive species to new areas.
  Grades: 5-12
  Teacher needs:
  Main topics: Aquatic Invasive Species of Idaho